| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | Supplying heavy gauge PVC conduit pipe 40mm dia 2.5mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. item no-3.4,Item 3.4.1,Item 3.4.2 page no-2, PWD SR 2019-20 | | | | | | | | |
| | 40 mm dia, 2.5 mm thick | Rm | 20 | | | | | 105 | **2100** |
| 13 | Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation.Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50 mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have inhouse facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. (PWD electrical S.R material list page no : 67 SL/NO 12.9) | | | | | | | | |
| | LED Flood light 70W | Each | 4 | | | | | 6800 | **27200** |
| 14 | Supplying and flush modular poweder coated / galvanized metal box suitable for mounting modular switch plates. the box should be firmil flush mounted after due groove cutting in brick /stone/C.C wall .. item no-1.2,Item 1.2.2,Item 1.2.3 page no-2, PWD SR 2018-19. | | | | | | | | |
| | 4 - 5 Way | Each | 4 | | | | | 105 | **420** |
| 15 | Supply and fixing of bakelite D.P /socket/switch with/ without neon indicator over existing wood board or flush mounting in plastic plates/nitches as per IS 1293 and IS 3854.,Item 3.6.11 page no-10, PWD SR 2018-19. | | | | | | | | |
| | 16Amps Combined switch and socket with indication | No | 1 | | | | | 162 | **162** |
| 16 | Supplying and fixing of Group A, regular MCB distribution boards on wall/woodboard/flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB'S single phase/ 3 phase / single door with powder coated painting made out of SWG MS enclosute. item no-5.18,Item5.18.4 page no-27,28 PWD SR 2018-19. | | | | | | | | |
| | 12 way SP & N | Nos | 1 | | | | | 1210 | **1210** |
| 17 | Supply and fixing miniature circuit breakers on the existing MCB distribution boards using necessary fixing meterials and "C" type curve, Indiator ON/OFF energy cross -3 with as required confirming to IEC 60898 item no-5.17,Item 5.17.4. page no-27, PWD SR 2018-19. | | | | | | | | |
| | 6-32 AMPS DP | Nos | 1 | | | | | 909 | **909** |
| 18 | Wiring for lighting/power circuit using Grade using one of FRLS PVC insulated 1100 volts grade, multistrand copper with low conductor resistance single core wire in open or concealed system of wiring. With specified IS-694: confirming to Latest amendements. item no-2.3,Item2.3.4 page no-5,6 PWD SR 2018-19. | | | | | | | | |
| | 4sqmm | Rm | 25 | | | | | 45 | **1125** |
| 19 | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder<br><br>coated painting. Made out of 14 SWG MS enclosure.item no-5.18,page no-27, PWD SR 2019-20. | | | | | | | | |
| | Double door, 12Way SP &N | each | 1 | | | | | 1800 | **1800** |
| 20 | Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975, item no-6.4.2, page no-40, PWD SR 2019-20. | | | | | | | | |
| | 4 core 10 sqmm | Rm | 50 | | | | | 130 | **6500** |
| 21 | Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150 mm all-round the cable item 6.7,page no- 41 SR 2018-19. | | | | | | | | |
| | | Mtr | 45 | | | | | 100 | **4500** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 22 | Supplying and fixing L.T. cast Iron pot heads suitable for 1.1KV class UG cable filled with necessary bitumen/ insulating compound complete with terminals,lamps, bolts, nuts and washers etc. item 6.10.5,page no- 42SR 2018-19. | | | | | | | | |
| | 50 sqmm | each | 1 | | | | | 618 | 618 |
| | | | | | | | | **Sub total** | **46576** |
| | | | | | | | | **12%GST** | **5589** |
| | | | | | | | | **Sub Total** | **52165** |
| | | | | | | | | **Grand Total Sub-1 & Sub-2** | **847454** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20,SE-RDED approved Rate and Issued Rates.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

## Bruhat Bengaluru Mahanagara Palike

**Name of Work: Construction of Sculptures in Parks, Lakes, Circles and Junctions in ward No.01, 02, 03 and 04 of Yelahanka Sub Division**

**Sub estimate 10 : Civil Works for ELECTRICAL POLE and Cable Laying**

| S.No. | Description of Work /Specification | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually ( other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables ) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 Note :Adopt item 2.24 for excavation in all types of soils for lowering & levelling the ground for building works by mechanical means KBS Pg No 6, Item No 2.1 | | | | | | | | |
| 1 | **Earthwork Excavation** | | | | | | | | |
| | For all the proposed electrical Poles | Cum | 7 | 0.7 | 0.7 | 1 | 3.43 | | |
| | For UG cable throuhout legth and for electrical poles (120 + 15X5+5X20) | | 1 | 295 | 0.45 | 0.45 | 59.738 | | |
| | Basic rate | | | | | | | 249.00 | |
| | Area weightage 6% | | | | | | | 14.94 | |
| | Total | | | | | | **63.17** | **263.94** | **16672** |
| 2 | KSRB 2-11 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by Ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications..( P-7 Sl.no -2.11) PWD SR 2018-19 | | | | | | | | |
| | For all the proposed electrical Poles | Cum | 7 | 0.7 | 0.7 | 1 | 3.43 | | |
| | For UG cable throuhout legth and for electrical poles (120 + 15X5+5X20) | Cum | 1 | 295 | 0.45 | 0.45 | 59.738 | | |
| | Basic rate | | | | | | | 121.00 | |
| | Area weightage 6% | | | | | | | 7.26 | |
| | Total | | | | | | **63.17** | **128.26** | **8102** |
| 3 | KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. KBS Pg No 7, Item No 2.15 | | | | | | | | |
| | Soling Below ground | cum | 7 | 0.7 | 0.7 | 0.2 | 0.686 | | |
| | Basic rate | | | | | | | 2429.00 | |
| | Area weightage 6% | | | | | | | 145.74 | |
| | **Total** | | | | | | 0.69 | **2574.74** | **1766** |
| 4 | KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8( M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 Pg No.13 Item No 4.3 | | | | | | | | |
| | **Pcc** | | | | | | | | |
| | **Below ground** | cum | 7 | 0.7 | 0.7 | 0.2 | 0.686 | | |
| | Basic rate | | | | | | | 5102.0 | |
| | Area weightage 6% | | | | | | | 306.1 | |
| | **Total** | | | | | | **0.69** | **5408.12** | **3710** |
| 5 | KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14 Item No. 4.11 | | | | | | | | |
| | Concrete footing around eletrical pole below=0.7 , above ground =0.2 | cum | 7 | 0.5 | 0.5 | 0.9 | 1.575 | | |
| | Basic rate | | | | | | | 5659.0 | |
| | Area weightage 6% | | | | | | | 339.5 | |
| | **Total** | | | | | | **1.58** | **5998.54** | **9448** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour machinery complete as per specifications. Specification No. KBS 4.6.3 - Pg No. 18 TMT bars Fe 500 | | | | | | | | |
| 6 | Concrete footing around eletrical pole below=0.7 , above ground =0.2 | | | | | | | | |
| | Considering 60 kg/Cum of concrete | tonne | 1 | | 1.58 | | 0.09 | | |
| | Basic rate | | | | | | | 70966 | |
| | Area weightage 6% | | | | | | | 4258 | |
| | **Total** | | | | | | **0.09** | **75224** | **7109** |
| | KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, post and struts, square / rectangular/ polygon in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 Pg No. 16 Item No. 4.46.2 | | | | | | | | |
| 7 | Concrete footing around eletrical pole below=0.7 , above ground =0.2 | sqm | 7 | 2 | | 0.9 | 12.60 | | |
| | Basic rate | | | | | | | 456.0 | |
| | Area weightage 6% | | | | | | | 27.4 | |
| | **Total** | | | | | | **12.60** | **483.36** | **6090** |
| | | | | | | | | **Sub Total Amount** | **52897** |
| | | | | | | | | **ADD 12% GST** | **6348** |
| | | | | | | | | **Grand Total** | **59245** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20, SE-RDED approved Rate and Issued Rates.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

## Bruhat Bengaluru Mahanagara Palike

Name of Work: Construction of Sculptures in Parks, Lakes, Circles and Junctions in ward No.01, 02, 03 and 04 of Yelahanka Sub Division

Sub estimate 11: Civil Works for Bullcart at kogilu junction

| S.No. | Description of Work /Specification | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually ( other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables ) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 Note :Adopt item 2.24 for excavation in all types of soils for lowering & levelling the ground for building works by mechanical means KBS Pg No 6, Item No 2.1 | | | | | | | | |
| 1 | **Earthwork Excavation** | | | | | | | | |
| | Below ground Level | Cum | 1 | 6.39 | 3.9 | 1.1 | 27.41 | | |
| | All-Around Plateform Arc length = 9.5+9.5 , H-length 17 +17 = 53 M | | 1 | 53.00 | 0.2 | 0.2 | 2.12 | | |
| | Basic rate | | | | | | | 249.00 | |
| | Area weightage 6% | | | | | | | 14.94 | |
| | Total | | | | | | **29.53** | **263.94** | **7795** |
| | KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. KBS Pg No 7, Item No 2.15 | | | | | | | | |
| 2 | Soiling Below ground Level | Cum | 1 | 6.09 | 3.6 | 0.2 | 4.38 | | |
| | Basic rate | | | | | | | 2429.00 | |
| | Area weightage 6% | | | | | | | 145.74 | |
| | Total | | | | | | 4.38 | **2574.74** | **11290** |
| | KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8( M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 Pg No.13 Item No 4.3 | | | | | | | | |
| 3 | PCC | | | | | | | | |
| | **Below ground Level** | Cum | 1 | 5.79 | 3.3 | 0.15 | 2.87 | | |
| | **Laying of Granite** | | 1 | 115.00 | | 0.15 | 17.25 | | |
| | All-Around Plat form Arc length = 9.5+9.5 , H-length 17 +17 = 53 M | | 1 | 53.00 | 0.2 | 0.15 | 1.59 | | |
| | Basic rate | | | | | | | 5102.0 | |
| | Area weightage 6% | | | | | | | 306.1 | |
| | Total | | | | | | **21.71** | **5408.12** | **117389** |
| | KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14 Item No. 4.11 | | | | | | | | |
| 4 | For Platform | Cum | 1 | 5.49 | 3 | 2.25 | 37.06 | | |
| | Basic rate | | | | | | | 5659.0 | |
| | Area weightage 6% | | | | | | | 339.5 | |
| | Total | | | | | | **37.06** | **5998.54** | **222291** |
| | KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - Pg No. 18 TMT bars Fe 500 | | | | | | | | |
| 5 | Considering 70 kg/Cum of concrete | tonne | 1 | 37.06 | | | 2.59 | | |
| | Basic rate | | | | | | | 70966 | |
| | Area weightage 6% | | | | | | | 4258 | |
| | Total | | | | | | **2.59** | **75223.96** | **195133** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., Removal of form Work etc.., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications. Specifications No. KBS 4.6.5, Pg No 16,Item No 4.32 | | | | | | | | | |
| | For all round Platform | sqm | 1 | 16.98 | | 2.25 | 38.21 | | | |
| | Basic rate | | | | | | | 456.0 | | |
| | Area weightage 6% | | | | | | | 27.4 | | |
| | **Total** | | | | | | **38.21** | **483.36** | | **18467** |
| 7 | 14.58. Providing and fixing granite flooring in combination of 19 mm thick (Avg) gang saw water cut LAKARED granite with 86% and with 14% of 19mm thicl (avg) Black granite in CM 1:4 proportion with a coat of rough plastering using CM 1:4, cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, grooves in joints including cost of curing etc., complete including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS 14.58 , Pg No 111,Item No 14.58 | | | | | | | | | |
| | For all round Platform-Vertical Cladding | Sqm | 1 | 16.98 | 1.5 | | 25.47 | | | |
| | Top Platform-Horizontal Cladding | Sqm | 1 | 5.49 | 3 | | 16.47 | | | |
| | All-around Plat-form | Sqm | 1 | 53 | 0.21 | | 11.13 | | | |
| | Area weightage 6% | | | | | | | 3474 | | |
| | **Total** | | | | | | | 208.4 | | |
| | | | | | | | **53.07** | **3682.44** | | **195427** |
| 8 | 14.55, Providing full nosing for 20mm thick granite slab using required machinery including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS No.14.55, Pg No.111 | | | | | | | | | |
| | For all round Platform | | | | | | | | | |
| | For Vertical Cladding- four corners | m | 1 | 16.988 | | | 16.99 | | | |
| | | m | 4 | 1.5 | | | 6.00 | | | |
| | Area weightage 6% | | | | | | | **270** | | |
| | Total | | | | | | | 16.2 | | |
| | | | | | | | **22.99** | **286.20** | | **6579** |
| 9 | KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400 X 200X200mm having block density not less than 1800kg/m3 having a minimum average compressive strength 5.00N/mm2 confirming to IS 2185 (part 1) :2005 and constructed with cement mortar 1:4,as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machinaries etc., complete as per specifications. KBS No.5.14, Pg No. 27 Item No. 5.26.1 | | | | | | | | | |
| | All-Around Platform Arc length = 9.5+9.5 , H-length 17 +17 = 53 M | Sqm | 1 | 53 | | 0.6 | 31.80 | | | |
| | Basic rate | | | | | | | 912.0 | | |
| | Area weightage 6% | | | | | | | 54.7 | | |
| | **Total** | | | | | | **31.80** | **966.7** | | **30742** |
| 10 | KBS 14.47.1 Providing and laying flooring using prepolished, water cut/gang saw 19mm thick granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 1200mm Specification No. KBS 14.47.1 Pg No.109 | | | | | | | | | |
| | Around Platform | Sqm | 1 | 115 | | | 115.00 | | | |
| | All-Around Plateform Arc length = 9.5+9.5 , H-length 17 +17 = 53 M | Sqm | 2 | 53 | | 0.4 | 42.40 | | | |
| | Area weightage 6% | | | | | | | 2739 | | |
| | Total | | | | | | | 164.3 | | |
| | | | | | | | 157.40 | **2903.34** | | **456986** |
| 11 | Providing and fixing Stainless steel staircase raling as per Chief Architect Drawing No. 11520/ HRSC with hand rail 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges, etc., complete as per specifications.. Pg No. 45 Item No. 7.38 | | | | | | | | | |
| | For all round Platform-safety 17+17+9.4+9.4 | Sqm | 1 | 53 | | 1.2 | 63.60 | | | |
| | Area weightage 6% | | | | | | | 6021 | | |
| | Total | | | | | | | 361.3 | | |
| | | | | | | | 63.60 | **6382.26** | | **405912** |
| | | | | | | | | **Sub Total Amount** | | **1668010** |
| | | | | | | | | **ADD 12% GST** | | **200161** |
| | | | | | | | | **Grand Total** | | **1868171** |

| Sl. No. | Description | Unit | Nos | L | B | D | Quantity | Rate | Amount (Rs) |
|---|---|---|---|---|---|---|---|---|---|
| | **Electrical Works (Lighting)** | | | | | | | | |
| 122 | Supplying heavy gauge PVC conduit pipe 40mm dia 2.5mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. item no-3.4,Item 3.4.1,Item 3.4.2 page no-2, PWD SR 2019-20 | | | | | | | | |
| | 40 mm dia, 2.5 mm thick | Rm | 20 | | | | | 105 | **2100** |
| 123 | Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation.Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50 mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the night site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have inhouse facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. (PWD electrical S.R material list page no : 67 SL/NO 12.9) | | | | | | | | |
| | LED Flood light 70W | Each | 4 | | | | | 6800 | **27200** |
| 124 | Supplying and flush modular poweder coated / galvanized metal box suitable for mounting modular switch plates. the box should be firmil flush mounted after due groove cutting in brick /stone/C.C wall .. item no-1.2,Item 1.2.2,Item 1.2.3 page no-2, PWD SR 2018-19. | | | | | | | | |
| | 4 - 5 Way | Each | 4 | | | | | 105 | **420** |
| 125 | Supply and fixing of bakelite D.P /socket/switch with/ without neon indicator over existing wood board or flush mounting in plastic plates/nitches as per IS 1293 and IS 3854.,Item 3.6.11 page no-10, PWD SR 2018-19. | | | | | | | | |
| | 16Amps Combined switch and socket with indication | No | 1 | | | | | 162 | **162** |
| 126 | Supplying and fixing of Group A, regular MCB distribution boards on wall/woodboard/flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB'S single phase/ 3 phase / single door with powder coated painting made out of SWG MS enclosute. item no-5.18,Item5.18.4 page no-27,28 PWD SR 2018-19. | | | | | | | | |
| | 12 way SP & N | Nos | 1 | | | | | 1210 | **1210** |
| 127 | Supply and fixing miniature circuit breakers on the existing MCB distribution boards using necessary fixing meterials and "C" type curve, Indiator ON/OFF energy cross -3 with as required confirming to IEC 60898 item no-5.17,Item 5.17.4. page no-27, PWD SR 2018-19. | | | | | | | | |
| | 6-32 AMPS DP | Nos | 1 | | | | | 909 | **909** |
| 128 | Wiring for lighting/power circuit using Grade using one of FRLS PVC insulated 1100 volts grade, multistrand copper with low conductor resistance single core wire in open or concealed system of wiring. With specified IS-694: confirming to Latest amendements. item no-2.3,Item2.3.4 page no-5,6 PWD SR 2018-19. | | | | | | | | |
| | 4sqmm | Rm | 25 | | | | | 45 | **1125** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 19 | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.item no-5.18,page no-27, PWD SR 2019-20. | | | | | | | | |
| | Double door, 12Way SP &N | each | 1 | | | | | 1800 | **1800** |
| 20 | Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975, item no-6.4.2, page no-40, PWD SR 2019-20. | | | | | | | | |
| | 4 core 10 sqmm | Rm | 50 | | | | | 130 | **6500** |
| 21 | Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150 mm all-round the cable item 6.7,page no- 41 SR 2018-19. | | | | | | | | |
| | | Mtr | 45 | | | | | 100 | **4500** |
| 22 | Supplying and fixing L.T. cast Iron pot heads suitable for 1.1KV class UG cable filled with necessary bitumen/ insulating compound complete with terminals,lamps, bolts, nuts and washers etc. item 6.10.5,page no- 42SR 2018-19. | | | | | | | | |
| | 50 sqmm | each | 1 | | | | | 618 | **618** |
| | **Sub total** | | | | | | | | **46576** |
| | **12%GST** | | | | | | | | **5589** |
| | **Sub Total** | | | | | | | | **52165** |
| | | | | | | | | **Grand Total Sub-1 & Sub-2** | **1920336** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20,PRED 2019-20, SE-RDED approved Rate and Issued Rates.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

## Bruhat Bengaluru Mahanagara Palike

Name of Work: Construction of Sculptures in Parks, Lakes, Circles and Junctions in ward No.01, 02, 03 and 04 of Yelahanka Sub Division

Sub estimate 12: Civil Works for Boat at yelahanka Lake

| S.No. | Description of Work /Specification | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually ( other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables ) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 Note :Adopt item 2.24 for excavation in all types of soils for lowering & levelling the ground for building works by mechanical means KBS Pg No 6, Item | | | | | | | | |
| 1 | **Earthwork Excavation** | | | | | | | | |
| | Below ground Level | Cum | 1 | 6.39 | 3.03 | 1.1 | 21.30 | | |
| | All-Around Platform , H-length10 +6 x 2= 32 M | Cum | 2 | 16 | 0.2 | 2.2 | 14.08 | | |
| | Basic rate | | | | | | | 249.00 | |
| | Area weightage 6% | | | | | | | 14.94 | |
| | Total | | | | | | **35.38** | **263.94** | **9338** |
| | KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. KBS Pg No 7, Item No 2.15 | | | | | | | | |
| 2 | Soling Below ground Level | Cum | 1 | 6.09 | 2.73 | 0.2 | 3.33 | | |
| | Basic rate | | | | | | | 2429.00 | |
| | Area weightage 6% | | | | | | | 145.74 | |
| | Total | | | | | | 3.33 | **2574.74** | **8561** |
| | KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8( M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 Pg No.13 Item No 4.3 | | | | | | | | |
| | PCC | | | | | | | | |
| 3 | **Below ground Level** | Cum | 1 | 5.79 | 2.43 | 0.15 | 2.11 | | |
| | **Laying of Granite = deduct platform Area** | Cum | 1 | 48.30 | | 0.15 | 7.25 | | |
| | **All-Around Plateform , H-length10 +6 = 32 M** | Cum | 1 | 16.00 | 0.20 | 0.15 | 0.48 | | |
| | Basic rate | | | | | | | 5102.0 | |
| | Area weightage 6% | | | | | | | 306.1 | |
| | Total | | | | | | **9.84** | **5408.12** | **53191** |
| | KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14 Item No. 4.11 | | | | | | | | |
| 4 | For Platform | Cum | 1 | 5.49 | 2.13 | 2.25 | 26.31 | | |
| | Basic rate | | | | | | | 5659.0 | |
| | Area weightage 6% | | | | | | | 339.5 | |
| | Total | | | | | | **26.31** | **5998.54** | **157827** |
| | KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - Pg No. 18 TMT bars Fe 500 | | | | | | | | |
| 5 | Considering 70 kg/Cum of concrete | tonne | 1 | 26.31 | | | 1.84 | | |
| | Basic rate | | | | | | | 70966 | |
| | Area weightage 6% | | | | | | | 4258 | |
| | Total | | | | | | **1.84** | **75224** | **138544** |
| | KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., Removal of form Work etc.., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications. Specifications No. KBS 4.6.5, Pg No 16,Item No 4.32 | | | | | | | | |
| 6 | For all round Platform | sqm | 1 | 15.2 | | 2.25 | 34.29 | | |
| | Basic rate | | | | | | | 456.0 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Area weightage 6% | | | | | | | 27.4 | |
| | **Total** | | | | | | **34.29** | **483.36** | **16574** |
| 7 | 14.58. Providing and fixing granite flooring in combination of 19 mm thick (Avg) gang saw water cut LAKARED granite with 86% and with 14% of 19mm thicl (avg) Black granite in CM 1:4 proportion with a coat of rough plastering using CM 1:4, cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, grooves in joints including cost of curing etc., complete including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS 14.58 , Pg No 111,Item No 14.58 | | | | | | | | |
| | For all round Platform-Vertical Cladding | Sqm | 1 | 15.2 | 1.5 | | 22.86 | | |
| | Top Platform-Horizontal Cladding | Sqm | 1 | 5.49 | 2.13 | | 11.69 | | |
| | All-around Platform | Sqm | 1 | 32 | 0.2 | | 6.40 | | |
| | | | | | | | | 3474 | |
| | Area weightage 6% | | | | | | | 208.4 | |
| | **Total** | | | | | | **40.95** | **3682.44** | **150810** |
| 8 | 14.55, Providing full nosing for 20mm thick granite slab using required machinery including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS No.14.55, Pg No.111 | | | | | | | | |
| | For all round Platform | m | 1 | 15.4 | | | 15.38 | | |
| | For Vertical Cladding- four corners | m | 4 | 1.5 | | | 6.00 | | |
| | | | | | | | | **270** | |
| | Area weightage 6% | | | | | | | 16.2 | |
| | Total | | | | | | **21.38** | **286.20** | **6119** |
| 9 | Providing and fixing Stainless steel staircase raling as per Chief Architect Drawing No. 11520/ HRSC with hand rail 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges, etc., complete as per specifications.. Pg No. 45 Item No. 7.38 | | | | | | | | |
| | For all round Platform- | Sqm | 1 | 32 | | 1.2 | 38.40 | | |
| | | | | | | | | 6021 | |
| | Area weightage 6% | | | | | | | 361.3 | |
| | Total | | | | | | 38.40 | **6382.26** | **245079** |
| 10 | KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400 X 200X200mm having block density not less than 1800kg/m3 having a minimum average compressive strength 5.00N/mm2 confirming to IS 2185 (part 1) :2005 and constructed with cement mortar 1:4,as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machinaries etc., complete as per specifications. KBS No.5.14, Pg No. 27 Item No. 5.26.1 | | | | | | | | |
| | Around the sculpture | Sqm | 1 | 32 | | 0.6 | 19.20 | | |
| | Basic rate | | | | | | | 912.0 | |
| | Area weightage 6% | | | | | | | 54.7 | |
| | **Total** | | | | | | **19.20** | **966.7** | **18561** |
| 11 | KBS 14.47.1 Providing and laying flooring using prepolished, water cut/gang saw 19mm thick granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 1200mm Specification No. KBS 14.47.1 Pg No.109 | | | | | | | | |
| | Around Platform | Sqm | 1 | 40 | | | 40.00 | | |
| | all-around Plat-form | | 2 | 32 | | 0.4 | 25.60 | | |
| | | | | | | | | 2739 | |
| | Area weightage 6% | | | | | | | 164.3 | |
| | Total | | | | | | 65.60 | **2903.34** | **190459** |
| | | | | | | | | **Sub Total Amount** | **995063** |
| | | | | | | | | **ADD 12% GST** | **119408** |
| | | | | | | | | **Grand Total** | **1114471** |

| Sl. No. | Description | Unit | Nos | L | B | D | Quantity | Rate | Amount (Rs) |
|---|---|---|---|---|---|---|---|---|---|
| | **Electrical Works (Lighting)** | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | Supplying heavy gauge PVC conduit pipe 40mm dia 2.5mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. item no-3.4,Item 3.4.1,Item 3.4.2 page no-2, PWD SR 2019-20 | | | | | | | | |
| | 40 mm dia, 2.5 mm thick | Rm | 20 | | | | | 105 | **2100** |
| 13 | Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation.Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50 mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have inhouse facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. (PWD electrical S.R material list page no : 67 SL/NO 12.9) | | | | | | | | |
| | LED Flood light 70W | Each | 4 | | | | | 6800 | **27200** |
| 14 | Supplying and flush modular poweder coated / galvanized metal box suitable for mounting modular switch plates. the box should be firmil flush mounted after due groove cutting in brick /stone/C.C wall .. item no-1.2,Item 1.2.2,Item 1.2.3 page no-2, PWD SR 2018-19. | | | | | | | | |
| | 4 - 5 Way | Each | 4 | | | | | 105 | **420** |
| 15 | Supply and fixing of bakelite D.P /socket/switch with/ without neon indicator over existing wood board or flush mounting in plastic plates/nitches as per IS 1293 and IS 3854.,Item 3.6.11 page no-10, PWD SR 2018-19. | | | | | | | | |
| | 16Amps Combined switch and socket with indication | No | 1 | | | | | 162 | **162** |
| 16 | Supplying and fixing of Group A, regular MCB distribution boards on wall/woodboard/flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB'S single phase/ 3 phase / single door with powder coated painting made out of SWG MS enclosute. item no-5.18,Item5.18.4 page no-27,28 PWD SR 2018-19. | | | | | | | | |
| | 12 way SP & N | Nos | 1 | | | | | 1210 | **1210** |
| 17 | Supply and fixing miniature circuit breakers on the existing MCB distribution boards using necessary fixing meterials and "C" type curve, Indiator ON/OFF energy cross -3 with as required confirming to IEC 60898 item no-5.17,Item 5.17.4. page no-27, PWD SR 2018-19. | | | | | | | | |
| | 6-32 AMPS DP | Nos | 1 | | | | | 909 | **909** |
| 18 | Wiring for lighting/power circuit using Grade using one of FRLS PVC insulated 1100 volts grade, multistrand copper with low conductor resistance single core wire in open or concealed system of wiring. With specified IS-694: confirming to Latest amendements. item no-2.3,Item2.3.4 page no-5,6 PWD SR 2018-19. | | | | | | | | |
| | 4sqmm | Rm | 25 | | | | | 45 | **1125** |
| 19 | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder<br><br>coated painting. Made out of 14 SWG MS enclosure.item no-5.18,page no-27, PWD SR 2019-20. | | | | | | | | |
| | Double door, 12Way SP &N | each | 1 | | | | | 1800 | **1800** |
| 20 | Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975, item no-6.4.2, page no-40, PWD SR 2019-20. | | | | | | | | |
| | 4 core 10 sqmm | Rm | 50 | | | | | 130 | **6500** |
| 21 | Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150 mm all-round the cable item 6.7,page no- 41 SR 2018-19. | | | | | | | | |
| | | Mtr | 45 | | | | | 100 | **4500** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 22 | Supplying and fixing L.T. cast Iron pot heads suitable for 1.1KV class UG cable filled with necessary bitumen/ insulating compound complete with terminals,lamps, bolts, nuts and washers etc. item 6.10.5,page no- 42SR 2018-19. | | | | | | | | |
| | 50 sqmm | each | 1 | | | | | 618 | **618** |
| | | | | | | | | **Sub total** | **46544** |
| | | | | | | | | **12%GST** | **5585** |
| | | | | | | | | **Sub Total** | **52129** |
| | | | | | | | | **Grand Total Sub-1 & Sub-2** | **1166600** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20, SE-RDED approved data-Rate and Issu ed

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

## Bruhat Bengaluru Mahanagara Palike

**Name of Work: Construction of Sculptures in Parks, Lakes, Circles and Junctions in ward No.01, 02, 03 and 04 of Yelahanka Sub Division**

**Sub estimate 13: Civil Works for DEER AT Savarkar Junction**

| S.No. | Description of Work /Specification | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually ( other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables ) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 Note :Adopt item 2.24 for excavation in all types of soils for lowering & levelling the ground for building works by mechanical means KBS Pg No 6, Item No 2.1 | | | | | | | | |
| | **Earthwork Excavation** | | | | | | | | |
| | Below ground Level | Cum | 1 | 2.73 | 2.2 | 1.1 | 6.61 | | |
| | all-Around platform | | 4 | 7.5 | 0.2 | 0.2 | 1.20 | | |
| | Basic rate | | | | | | | 249.00 | |
| | Area weightage 6% | | | | | | | 14.94 | |
| | Total | | | | | | **7.81** | **263.94** | **2060** |
| 2 | KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. KBS Pg No 7, Item No 2.15 | | | | | | | | |
| | Soling Below ground Level | Cum | 1 | 2.43 | 1.9 | 0.2 | 0.92 | | |
| | Basic rate | | | | | | | 2429.00 | |
| | Area weightage 6% | | | | | | | 145.74 | |
| | **Total** | | | | | | 0.92 | **2574.74** | **2378** |
| 3 | KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8( M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 Pg No.13 Item No 4.3 | | | | | | | | |
| | **PCC** | | | | | | | | |
| | **Below ground Level** | Cum | 1 | 2.13 | 1.6 | 0.15 | 0.51 | | |
| | **Laying of Granite** | | 1 | 45.57 | | 0.15 | 6.84 | | |
| | **All-Around platform** | | 1 | 30.00 | 0.20 | 0.15 | 0.90 | | |
| | Basic rate | | | | | | | 5102.0 | |
| | Area weightage 6% | | | | | | | 306.1 | |
| | **Total** | | | | | | **8.25** | **5408.12** | **44599** |
| 4 | KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14 Item No. 4.11 | | | | | | | | |
| | For Platform | Cum | 1 | 1.83 | 1.3 | 2.25 | 5.35 | | |
| | Basic rate | | | | | | | 5659.0 | |
| | Area weightage 6% | | | | | | | 339.5 | |
| | **Total** | | | | | | **5.35** | **5998.54** | **32109** |
| 5 | KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - Pg No. 18 TMT bars Fe 500 | | | | | | | | |
| | Considering 70 kg/Cum of concrete | tonne | 1 | 5.35 | | | 0.37 | | |
| | Basic rate | | | | | | | 70966 | |
| | Area weightage 6% | | | | | | | 4258 | |
| | **Total** | | | | | | **0.37** | **75223.96** | **28186** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6 | KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., Removal of form Work etc.., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications. Specifications No. KBS 4.6.5, Pg No 16,Item No 4.32 | | | | | | | | |
| | For all round Platform | sqm | 1 | 6.26 | | 2.25 | 14.08 | | |
| | Basic rate | | | | | | | 456.0 | |
| | Area weightage 6% | | | | | | | 27.4 | |
| | **Total** | | | | | | **14.08** | **483.36** | **6806** |
| 7 | 14.58. Providing and fixing granite flooring in combination of 19 mm thick (Avg) gang saw water cut LAKARED granite with 86% and with 14% of 19mm thicl (avg) Black granite in CM 1:4 proportion with a coat of rough plastering using CM 1:4, cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, grooves in joints including cost of curing etc., complete including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS 14.58 , Pg No 111,Item No 14.58 | | | | | | | | |
| | For all round Platform-Vertical Cladding | Sqm | 1 | 6.26 | | 1.5 | 9.39 | | |
| | Top Platform-Horizontal Cladding | Sqm | 1 | 1.83 | 1.3 | | 2.38 | | |
| | | | | | | | | 3474 | |
| | Area weightage 6% | | | | | | | 208.4 | |
| | **Total** | | | | | | **11.77** | **3682.44** | **43339** |
| 8 | 14.55, Providing full nosing for 20mm thick granite slab using required machinery including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS No.14.55, Pg No.111 | | | | | | | | |
| | For all round Platform | m | 1 | 6.26 | | | 6.26 | | |
| | For Vertical Cladding- four corners | m | 4 | 1.5 | | | 6.00 | | |
| | | | | | | | | **270** | |
| | Area weightage 6% | | | | | | | 16.2 | |
| | Total | | | | | | **12.26** | **286.20** | **3509** |
| 9 | Providing and fixing Stainless steel staircase raling as per Chief Architect Drawing No. 11520/ HRSC with hand rail 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges, etc., complete as per specifications.. Pg No. 45 Item No. 7.38 | | | | | | | | |
| | For all round Platform-safety | Sqm | 1 | 30 | | 1.2 | 36.00 | | |
| | | | | | | | | 6021 | |
| | Area weightage 6% | | | | | | | 361.3 | |
| | Total | | | | | | 36.00 | **6382.26** | **229761** |
| 10 | KBS 14.47.1 Providing and laying flooring using prepolished, water cut/gang saw 19mm thick granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 1200mm Specification No. KBS 14.47.1 Pg No.109 | | | | | | | | |
| | Around Platform | Sqm | 1 | 46 | | | 45.97 | | |
| | | Sqm | | 30 | | 0.4 | 12.00 | | |
| | | | | | | | | 2739 | |
| | Area weightage 6% | | | | | | | 164.3 | |
| | Total | | | | | | 57.97 | **2903.34** | **168307** |
| 11 | KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400 X 200X200mm having block density not less than 1800kg/m3 having a minimum average compressive strength 5.00N/mm2 confirming to IS 2185 (part 1) :2005 and constructed with cement mortar 1:4,as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machinaries etc., complete as per specifications. KBS No.5.14, Pg No. 27 Item No. 5.26.1 | | | | | | | | |
| | All-Around the sculpture | Sqm | 4 | 7.5 | | 0.6 | 18.00 | | |
| | Basic rate | | | | | | | 912.0 | |
| | Area weightage 6% | | | | | | | 54.7 | |
| | **Total** | | | | | | **18.00** | **966.7** | **17401** |
| | | | | | | | | **Sub Total Amount** | **578454** |
| | | | | | | | | **12%GST** | **69414** |
| | | | | | | | | **Grand Total** | **647868** |

| Sl. No. | Description | Unit | Nos | L | B | D | Quantity | Rate | Amount (Rs) |
|---|---|---|---|---|---|---|---|---|---|
| | **Electrical Works (Lighting)** | | | | | | | | |
| 12 | Supplying heavy gauge PVC conduit pipe 40mm dia 2.5mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. item no-3.4,Item 3.4.1,Item 3.4.2 page no-2, PWD SR 2019-20 | | | | | | | | |
| | 40 mm dia, 2.5 mm thick | Rm | 20 | | | | | 105 | **2100** |
| 13 | Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation.Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50 mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have inhouse facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. (PWD electrical S.R material list page no : 67 SL/NO 12.9) | | | | | | | | |
| | LED Flood light 70W | Each | 4 | | | | | 6800 | **27200** |
| 14 | Supplying and flush modular poweder coated / galvanized metal box suitable for mounting modular switch plates. the box should be firmil flush mounted after due groove cutting in brick /stone/C.C wall .. item no-1.2,Item 1.2.2,Item 1.2.3 page no-2, PWD SR 2018-19. | | | | | | | | |
| | 4 - 5 Way | Each | 4 | | | | | 105 | **420** |
| 15 | Supply and fixing of bakelite D.P /socket/switch with/ without neon indicator over existing wood board or flush mounting in plastic plates/nitches as per IS 1293 and IS 3854.,Item 3.6.11 page no-10, PWD SR 2018-19. | | | | | | | | |
| | 16Amps Combined switch and socket with indication | No | 1 | | | | | 162 | **162** |
| 16 | Supplying and fixing of Group A, regular MCB distribution boards on wall/woodboard/flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB'S single phase/ 3 phase / single door with powder coated painting made out of SWG MS enclosute. item no-5.18,Item5.18.4 page no-27,28 PWD SR 2018-19. | | | | | | | | |
| | 12 way SP & N | Nos | 1 | | | | | 1210 | **1210** |
| 17 | Supply and fixing miniature circuit breakers on the existing MCB distribution boards using necessary fixing meterials and "C" type curve, Indiator ON/OFF energy cross -3 with as required confirming to IEC 60898 item no-5.17,Item 5.17.4. page no-27, PWD SR 2018-19. | | | | | | | | |
| | 6-32 AMPS DP | Nos | 1 | | | | | 909 | **909** |
| 18 | Wiring for lighting/power circuit using Grade using one of FRLS PVC insulated 1100 volts grade, multistrand copper with low conductor resistance single core wire in open or concealed system of wiring. With specified IS-694: confirming to Latest amendements. item no-2.3,Item2.3.4 page no-5,6 PWD SR 2018-19. | | | | | | | | |
| | 4sqmm | Rm | 25 | | | | | 45 | **1125** |
| 19 | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.item no-5.18,page no-27, PWD SR 2019-20. | | | | | | | | |
| | Double door, 12Way SP &N | each | 1 | | | | | 1800 | **1800** |
| 20 | Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975, item no-6.4.2, page no-40, PWD SR 2019-20. | | | | | | | | |
| | 4 core 10 sqmm | Rm | 50 | | | | | 130 | **6500** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 21 | Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150 mm all-round the cable item 6.7,page no-41 SR 2018-19. | | | | | | | | |
| | | Mtr | 45 | | | | | 100 | **4500** |
| | | | | | | | | | |
| 22 | Supplying and fixing L.T. cast Iron pot heads suitable for 1.1KV class UG cable filled with necessary bitumen/ insulating compound complete with terminals,lamps, bolts, nuts and washers etc. item 6.10.5,page no- 42SR 2018-19. | | | | | | | | |
| | 50 sqmm | each | 1 | | | | | 618 | **618** |
| | | | | | | | | **Sub total** | **46576** |
| | | | | | | | | **12%GST** | **5589** |
| | | | | | | | | **Sub Total** | **52165** |
| | | | | | | | | **Grand Total Sub-1 & Sub-2** | **700033** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20,PRED 2019-20, SE-RDED approved Rate and Issued

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

## Bruhat Bengaluru Mahanagara Palike

**Name of Work: Construction of Sculptures in Parks, Lakes, Circles and Junctions in ward No.01, 02, 03 and 04 of Yelahanka Sub Division**

**Sub estimate 14: Civil Works for Asoka Pillar at yelahanka police station**

| S.No. | Description of Work /Specification | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually ( other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables ) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 Note :Adopt item 2.24 for excavation in all types of soils for lowering & levelling the ground for building works by mechanical means KBS Pg No 6, Item No 2.1 | | | | | | | | |
| | **Earthwork Excavation** | | | | | | | | |
| | Below ground Level | Cum | 1 | 4.75 | 4.55 | 1.35 | 29.18 | | |
| | all-around plat form | | 1 | 21.4 | 0.2 | 0.2 | 0.86 | | |
| | Basic rate | | | | | | | 249.00 | |
| | Area weightage 6% | | | | | | | 14.94 | |
| | Total | | | | | | **30.03** | **263.94** | **7927** |
| 2 | KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. KBS Pg No 7, Item No 2.15 | | | | | | | | |
| | Soling Below ground Level | Cum | 1 | 4.45 | 4.25 | 0.2 | 3.78 | | |
| | Basic rate | | | | | | | 2429.00 | |
| | Area weightage 6% | | | | | | | 145.74 | |
| | **Total** | | | | | | 3.78 | **2574.74** | **9739** |
| 3 | KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8( M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 Pg No.13 Item No 4.3 | | | | | | | | |
| | **PCC** | | | | | | | | |
| | **Below ground Level** | Cum | 1 | 4.15 | 3.65 | 0.15 | 2.27 | | |
| | **Laying of Granite** | | 1 | | 11.26 | 0.15 | 1.69 | | |
| | all-around plat form | | 1 | 21.40 | 0.20 | 0.15 | 0.64 | | |
| | Basic rate | | | | | | | 5102.0 | |
| | Area weightage 6% | | | | | | | 306.1 | |
| | **Total** | | | | | | **4.60** | **5408.12** | **24896** |
| 4 | KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14 Item No. 4.11 | | | | | | | | |
| | For Platform | Cum | 1 | 3.85 | 3.35 | 2.5 | 32.24 | | |
| | Basic rate | | | | | | | 5659.0 | |
| | Area weightage 6% | | | | | | | 339.5 | |
| | **Total** | | | | | | **32.24** | **5998.54** | **193415** |
| 5 | KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - Pg No. 18 TMT bars Fe 500 | | | | | | | | |
| | Considering 80 kg/Cum of concrete | tonne | 1 | | 32.24 | | 2.58 | | |
| | Basic rate | | | | | | | 70966 | |
| | Area weightage 6% | | | | | | | 4258 | |
| | **Total** | | | | | | **2.58** | **75224** | **194040** |
| 6 | KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., Removal of form Work etc.., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications. Specifications No. KBS 4.6.5, Pg No 16,Item No 4.32 | | | | | | | | |
| | For all round Platform | sqm | 1 | 15.4 | | 2.5 | 38.50 | | |
| | Basic rate | | | | | | | 456.0 | |
| | Area weightage 6% | | | | | | | 27.4 | |
| | Total | | | | | | **38.50** | **483.36** | **18609** |

## Bruhat Bengaluru Mahanagara Palike

**Name of Work: Construction of Sculptures in Parks, Lakes, Circles and Junctions in ward No.01, 02, 03 and 04 of Yelahanka Sub Division**

**Sub estimate 14: Civil Works for Asoka Pillar at yelahanka police station**

| S.No. | Description of Work /Specification | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually ( other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables ) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 Note :Adopt item 2.24 for excavation in all types of soils for lowering & levelling the ground for building works by mechanical means KBS Pg No 6, Item No 2.1 | | | | | | | | |
| | **Earthwork Excavation** | | | | | | | | |
| | Below ground Level | Cum | 1 | 4.75 | 4.55 | 1.35 | 29.18 | | |
| | all-around plat form | | 1 | 21.4 | 0.2 | 0.2 | 0.86 | | |
| | Basic rate | | | | | | | 249.00 | |
| | Area weightage 6% | | | | | | | 14.94 | |
| | Total | | | | | | **30.03** | **263.94** | **7927** |
| 2 | KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. KBS Pg No 7, Item No 2.15 | | | | | | | | |
| | Soling Below ground Level | Cum | 1 | 4.45 | 4.25 | 0.2 | 3.78 | | |
| | Basic rate | | | | | | | 2429.00 | |
| | Area weightage 6% | | | | | | | 145.74 | |
| | **Total** | | | | | | 3.78 | **2574.74** | **9739** |
| 3 | KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8( M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 Pg No.13 Item No 4.3 | | | | | | | | |
| | **PCC** | | | | | | | | |
| | **Below ground Level** | Cum | 1 | 4.15 | 3.65 | 0.15 | 2.27 | | |
| | **Laying of Granite** | | 1 | | 11.26 | 0.15 | 1.69 | | |
| | all-around plat form | | 1 | 21.40 | 0.20 | 0.15 | 0.64 | | |
| | Basic rate | | | | | | | 5102.0 | |
| | Area weightage 6% | | | | | | | 306.1 | |
| | **Total** | | | | | | **4.60** | **5408.12** | **24896** |
| 4 | KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14 Item No. 4.11 | | | | | | | | |
| | For Platform | Cum | 1 | 3.85 | 3.35 | 2.5 | 32.24 | | |
| | Basic rate | | | | | | | 5659.0 | |
| | Area weightage 6% | | | | | | | 339.5 | |
| | **Total** | | | | | | **32.24** | **5998.54** | **193415** |
| 5 | KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - Pg No. 18 TMT bars Fe 500 | | | | | | | | |
| | Considering 80 kg/Cum of concrete | tonne | 1 | | 32.24 | | 2.58 | | |
| | Basic rate | | | | | | | 70966 | |
| | Area weightage 6% | | | | | | | 4258 | |
| | **Total** | | | | | | **2.58** | **75224** | **194040** |
| 6 | KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., Removal of form Work etc.., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications. Specifications No. KBS 4.6.5, Pg No 16,Item No 4.32 | | | | | | | | |
| | For all round Platform | sqm | 1 | 15.4 | | 2.5 | 38.50 | | |
| | Basic rate | | | | | | | 456.0 | |
| | Area weightage 6% | | | | | | | 27.4 | |
| | **Total** | | | | | | **38.50** | **483.36** | **18609** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 14.58. Providing and fixing granite flooring in combination of 19 mm thick (Avg) gang saw water cut LAKARED granite with 86% and with 14% of 19mm thicl (avg) Black granite in CM 1:4 proportion with a coat of rough plastering using CM 1:4, cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, grooves in joints including cost of curing etc., complete including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS 14.58 , Pg No 111,Item No 14.58 | | | | | | | | | |
| | For all round Platform-Vertical Cladding | Sqm | 4 | 3.85 | 1.5 | | 23.10 | | |
| | Top Platform-Horizontal Cladding | Sqm | 1 | 2.61 | 2.61 | | 6.81 | | |
| | For all round Platform | | 1 | 21.4 | 0.21 | | 4.49 | | |
| | | | | | | | | 3474 | |
| | Area weightage 6% | | | | | | | 208.4 | |
| | **Total** | | | | | | **34.41** | **3682.44** | **126698** |
| 8 | 14.55, Providing full nosing for 20mm thick granite slab using required machinery including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification KBS No.14.55, Pg No.111 | | | | | | | | |
| | For all round Platform | m | 4 | 1.5 | | | 6.00 | | |
| | For Vertical Cladding- four corners | m | 4 | 3.85 | | | 15.40 | | |
| | | | | | | | | **270** | |
| | Area weightage 6% | | | | | | | 16.2 | |
| | Total | | | | | | **21.40** | **286.20** | **6125** |
| 9 | Providing and fixing Stainless steel staircase raling as per Chief Architect Drawing No. 11520/ HRSC with hand rail 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges, etc., complete as per specifications.. Pg No. 45 Item No. 7.38 | | | | | | | | |
| | For all round Platform-safety | Sqm | 4 | 21.4 | 1.2 | | 102.72 | | |
| | | | | | | | | 6021 | |
| | Area weightage 6% | | | | | | | 361.3 | |
| | Total | | | | | | 102.72 | **6382.26** | **655586** |
| 10 | KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400 X 200X200mm having block density not less than 1800kg/m3 having a minimum average compressive strength 5.00N/mm2 confirming to IS 2185 (part 1) :2005 and constructed with cement mortar 1:4,as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machinaries etc., complete as per specifications. KBS No.5.14, Pg No. 27 Item No. 5.26.1 | | | | | | | | |
| | Around the sculpture | Sqm | 1 | 21.4 | 0.6 | | 12.84 | | |
| | Basic rate | | | | | | | 912.0 | |
| | Area weightage 6% | | | | | | | 54.7 | |
| | **Total** | | | | | | **12.84** | **966.7** | **12413** |
| 11 | KBS 14.47.1 Providing and laying flooring using prepolished, water cut/gang saw 19mm thick granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 1200mm Specification No. KBS 14.47.1 Pg No.109 | | | | | | | | |
| | Around Platform 5.35 X 4 | Sqm | 2 | 21.4 | 0.4 | | 17.12 | | |
| | | | 1 | 11.26 | | | 11.26 | 2739 | |
| | Area weightage 6% | | | | | | | 164.3 | |
| | Total | | | | | | 28.38 | **2903.34** | **82397** |
| | | | | | | | | **Sub Total Amount** | **1331845** |
| | | | | | | | | **ADD 12% GST** | **159821** |
| | | | | | | | | **Grand Total** | **1491666** |

| Sl. No. | Description | Unit | Nos | L | B | D | Quantity | Rate | Amount (Rs) |
|---|---|---|---|---|---|---|---|---|---|
| | **Electrical Works (Lighting)** | | | | | | | | |
| 12 | Supplying heavy gauge PVC conduit pipe 40mm dia 2.5mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. item no-3.4,Item 3.4.1,Item 3.4.2 page no-2, PWD SR 2019-20 | | | | | | | | |
| | 40 mm dia, 2.5 mm thick | Rm | 20 | | | | | 105 | **2100** |
| 13 | Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation.Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50 mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have inhouse facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. (PWD electrical S.R material list page no : 67 SL/NO 12.9) | | | | | | | | |
| | LED Flood light 70W | Each | 4 | | | | | 6800 | **27200** |
| 14 | Supplying and flush modular poweder coated / galvanized metal box suitable for mounting modular switch plates. the box should be firmil flush mounted after due groove cutting in brick /stone/C.C wall .. item no-1.2,Item 1.2.2,Item 1.2.3 page no-2, PWD SR 2018-19. | | | | | | | | |
| | 4 - 5 Way | Each | 4 | | | | | 105 | **420** |
| 15 | Supply and fixing of bakelite D.P /socket/switch with/ without neon indicator over existing wood board or flush mounting in plastic plates/nitches as per IS 1293 and IS 3854.,Item 3.6.11 page no-10, PWD SR 2018-19. | | | | | | | | |
| | 16Amps Combined switch and socket with indication | No | 1 | | | | | 162 | **162** |
| 16 | Supplying and fixing of Group A, regular MCB distribution boards on wall/woodboard/flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB'S single phase/ 3 phase / single door with powder coated painting made out of SWG MS enclosute. item no-5.18,Item5.18.4 page no-27,28 PWD SR 2018-19. | | | | | | | | |
| | 12 way SP & N | Nos | 1 | | | | | 1210 | **1210** |
| 17 | Supply and fixing miniature circuit breakers on the existing MCB distribution boards using necessary fixing meterials and "C" type curve, Indiator ON/OFF energy cross -3 with as required confirming to IEC 60898 item no-5.17,Item 5.17.4. page no-27, PWD SR 2018-19. | | | | | | | | |
| | 6-32 AMPS DP | Nos | 1 | | | | | 909 | **909** |
| 18 | Wiring for lighting/power circuit using Grade using one of FRLS PVC insulated 1100 volts grade, multistrand copper with low conductor resistance single core wire in open or concealed system of wiring. With specified IS-694: confirming to Latest amendements. item no-2.3,Item2.3.4 page no-5,6 PWD SR 2018-19. | | | | | | | | |
| | 4sqmm | Rm | 25 | | | | | 45 | **1125** |
| 19 | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder<br><br>coated painting. Made out of 14 SWG MS enclosure.item no-5.18,page no-27, PWD SR 2019-20. | | | | | | | | |
| | Double door, 12Way SP &N | each | 1 | | | | | 1800 | **1800** |
| 20 | Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975, item no-6.4.2, page no-40, PWD SR 2019-20. | | | | | | | | |
| | 4 core 10 sqmm | Rm | 50 | | | | | 130 | **6500** |
| 21 | Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150 mm all-round the cable item 6.7,page no- 41 SR 2018-19. | | | | | | | | |
| | | Mtr | 45 | | | | | 100 | **4500** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 22 | Supplying and fixing L.T. cast Iron pot heads suitable for 1.1KV class UG cable filled with necessary bitumen/ insulating compound complete with terminals,lamps, bolts, nuts and washers etc. item 6.10.5,page no- 42SR 2018-19. | | | | | | | | |
| | 50 sqmm | each | 1 | | | | | 618 | 618 |
| | | | | | | | | **Sub total** | **46576** |
| | | | | | | | | **12%GST** | **5589** |
| | | | | | | | | **Sub Total** | **52165** |
| | | | | | | | | **Grand Total Sub-1 & Sub-2** | **1543831** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20,PRED 2019-20, SE-RDED approved Rate

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP